

This is a repository copy of *"I couldn't really put [mə] finger on it" : Phonetic realisations of the possessive singular 'my' in Tyneside English.*

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/123773/>

Version: Accepted Version

Article:

Childs, Claire orcid.org/0000-0002-3205-018X (2013) "I couldn't really put [mə] finger on it" : Phonetic realisations of the possessive singular 'my' in Tyneside English. Newcastle Working Papers in Linguistics: Selected Papers from Sociolinguistics Summer School 4. pp. 42-66.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

“I COULDN’T REALLY PUT [MƏ] FINGER ON IT”: PHONETIC REALISATIONS OF THE POSSESSIVE SINGULAR ‘MY’ IN TYNESIDE ENGLISH*

CLAIRE CHILDS
(Newcastle University)

Abstract

The phonetic realisation of the first-person singular possessive form *my* is highly variable, as observed by Hollmann and Siewierska (2007) in their account of the feature in Lancashire and Snell (2008, 2010) in her sociolinguistic study of Teesside school children’s speech. This paper presents an investigation into the phonetic variability of the possessive singular in a different variety, Tyneside English, using data from the Newcastle Electronic Corpus of Tyneside English 2 (NECTE2). Results show that the realisation of *my* is highly conditioned by stress, conversational turn maintenance, the (in)alienability of the following noun and the age, gender and social class of speakers.

1. Introduction

The first-person singular possessive *my*, sometimes known as the ‘possessive singular’, has a number of different phonetic realisations in speech. Snell’s (2008, 2010) research into the variable in the speech of Teesside primary school children and Hollmann and Siewierska’s (2007) usage-based, construction grammar analysis of *my* in the Lancashire dialect identify four phonetic variants of the form - [mai], [ma], [mi] and [mə]. In the speech of the 9–10 year olds in Teesside, this variable is conditioned by a number of intralinguistic and extralinguistic factors including phonetic environment, stress and stylistic context (Snell 2008, 2010). Hollmann and Siewierska (2007) also observe an (in)alienability effect where nouns that denote body parts or kinship occur with reduced variants of the possessive singular the most, which relates to the frequency of the nouns and how often they occur with *my*.

Using tokens from interviews in NECTE2 that were analysed acoustically in Praat (Boersma & Weenink 2012), I investigated how certain linguistic, social and stylistic factors condition the occurrence of particular variants of *my* in Tyneside English. Examining whether the findings from previous research hold in a different regional variety will help establish the extent to which particular patterns in the realisations of the possessive singular are dialect-specific or more widespread in vernacular English.

2. Possessive singular

The word *my* is a 1SG possessive form but different terms have been used in the literature to describe its part of speech. Most traditionally, *my* is referred to as a ‘possessive pronoun’, which reflects the fact that it is the possessive form of the personal pronoun *I* (Quirk et al. 1985: 336). However, syntactically, the 1SG possessive does not necessarily behave like a pronoun. If *my* occurs before a noun in English (e.g. *my car*), a determiner cannot precede it (e.g. (**the*) *my car*) which suggests that *my* is a ‘possessive determiner’

* I would like to thank Karen Corrigan and Cathleen Waters for their supervision and support, as well as S.J. Hannahs, Willem Hollmann and Adam Mearns for their help with aspects of my methodology. This work was supported by the Arts and Humanities Research Council (AHRC) Research Preparation Masters award. The title quotation is attributed to speaker 07-08/N/CD/111 in transcript T_8163_07_2 of NECTE2.

(Alexiadou 2004: 31–2). Some languages, such as Italian, do permit the use of a determiner before a possessive, in which cases *my* can be considered a ‘possessive adjective’ (Alexiadou 2004: 32). This term is sometimes used in the literature on English too, since *my* and other similar possessive forms ‘modify nouns’ (Baker 2012: 3). It therefore seems that any of these three terms can justifiably be used, but I will follow Snell’s (2008: 56) practice of using the more generic term ‘possessive singular’ to refer to the 1SG possessive *my*, as this avoids making an implicit claim about the form’s category.

Speakers of regional dialects may use pronouns in different ways to the Standard or use alternative pronominal forms altogether (Trudgill & Chambers 1991: 7, Beal 1993: 205). One such phenomenon not found in the Standard is often called ‘possessive *me*’, e.g. *I saw me friend yesterday*, which Trudgill and Chambers (1991: 7) claim is ‘very common in many parts of Britain, and occurs even in colloquial Standard English speech’. On the basis of such examples, Anderwald (2004: 175) suggests that *me* is ‘doing double service both as the object form of the personal pronoun and as a possessive pronoun’. Anderwald (2004: 175) asserts that this interpretation is the most common in synchronic linguistic research but does suggest an alternative where the form could represent *my*, ‘which, as a very frequent and unstressed form, may not have undergone the Great Vowel Shift’. The pronunciation [mi] before a noun therefore represents either (i) the object form *me* being used as a possessive in place of *my*, or (ii) a phonetic variant of *my* which is often represented orthographically as <me>. Hollmann and Siewierska (2007: 408) suggest that the notion of ‘possessive *me*’ would be supported if there was evidence of *us* used as a possessive too. However, there was only one example of this type in their Lancashire corpus from the North West Sound Archive, which is inconclusive. Snell (2008: 72) meanwhile argues that [mi] is not ‘possessive *me*’ on the grounds that in her ethnographic study of Teesside primary school children’s speech, one of the teachers did not believe that she had ever seen *me* used as a possessive in her pupils’ writing. However, I have encountered [mi] being represented as <me> or <mi>, such as on the 7 April 2012 episode of the British ITV1 television programme *Britain’s Got Talent*, where an act called ‘Mr Zip’ performed a rap that included repetition of ‘where [mi] keys?’ and ‘where [mi] phone?’.¹ The variant [mi] was represented as <me> in the title of the video on the *Britain’s Got Talent* official YouTube channel as well as in the Twitter hashtag ‘#wheremephone’ that was displayed onscreen both in the YouTube video and during the live broadcast. I suggest that forms such as <me> and <mi> are attempts to represent [mi] in the written medium, denoting ‘the most well-known, stereotypical features of the accent rather than a full and precise representation’ (Beal 2006: 22). As such, I will consider [mi] to be a phonetic realisation of the possessive singular *my*. The four variants, as identified by Wales (1996: 14), Hollmann and Siewierska (2007) and Snell (2008, 2010), are: [mai], [ma], [mi] and [mə].

2.1. Phonological, stylistic and social constraints

Snell (2008, 2010) undertook an ethnographic study of 9–10 year old children’s classroom and playground discourse in two Teesside primary schools; Ironstone Primary which is located in a lower-working-class area of Middlesbrough and Murrayfield Primary in a lower-middle-class locality in Stockton-on-Tees. All four variants of *my* featured in the recordings, as discussed below.

The standard variant is the diphthong [mai], which is the least reduced of the four realisations. Used 20% of the time, this was the second most frequent variant in the Teesside

¹ Britain’s Got Talent. (2012). Zipparah, Mr Zip, ‘Where me keys, where me phone’ – Britain’s Got Talent 2012 - UK version. *YouTube*. <<http://youtu.be/LT--h2GjaAU>> (accessed April 2012).

data and was preferred before vowels (Snell 2008: 65). The occurrence of the form before consonants meanwhile took place primarily in three contexts, the first of which was ‘a formal activity like reading or answering the teacher’s questions’ (Snell 2008: 66). The [mai] variant was also used before consonants in performance (particularly when the children were singing or adopted a stereotypical American or ‘posh’ persona when playing) or when the variant itself was stressed (Snell 2008: 66–7).

The [ma] realisation of *my* could also be stressed and was the preferred variant overall, accounting for 64.4% of tokens (Snell 2008: 65, 68). Most strikingly, [ma] appeared before consonants in 98.3% of cases, while the other 1.7% of examples featured a pause or glottal stop between the possessive singular and the noun beginning with a vowel (Snell 2008: 65).

The third variant, [mi], is dialectal and stigmatised (Wales 1996: 14). Teesside residents perceive it as specific to their dialect even though it is the rarest realisation (Snell 2008: 65, 74–5) and is found elsewhere in the British Isles (Wales 1996: 14) as well as in colonial Englishes (Clarke 2004: 254, Hickey 2004: 601, Quinn 2009: 43). Given the variant’s salience in Teesside, it could be a regional marker likely to occur in working class speech (Hughes et al. 2005: 15), which is consistent with Snell’s (2008: 65) finding that children at Ironstone Primary (the school categorised as working class) used [mi] to the greatest extent. Unlike [mai] and [ma], the [mi] variant occurred before a vocalic segment 70.3% of the time and was never stressed (Snell 2008: 69). Most significantly, [mi] was used by the children in stylised contexts (Snell 2008: 81), which involve ‘the knowing deployment of culturally familiar styles and identities that are marked as deviating from those predictably associated with the current speaking context’ (Coupland 2001: 345). The children used it when imitating advertisements or their peers, as well as in ‘self-talk’ that was not oriented to a certain person (Snell 2008: 87) but nevertheless intended to be overheard (Goffman 1981: 97). These were precisely the contexts in which the children wished to take a particular type of stance. Although stance can be defined in different ways (Biber & Finegan 1989: 93, Ochs 1996: 1, Berman 2004, Englebreton 2007), the notion generally encompasses ‘personal feelings, attitudes, value judgments, or assessments’ (Biber et al. 1999: 966). The [mi] variant was used to mark affective stance, where an attitude or emotion is expressed (Ochs 1996: 410), but specifically one that expresses negativity that is ‘tempered by a lack of seriousness and a degree of jocularly’ (Snell 2010: 643). Epistemic stance, which concerns the speaker’s orientation towards the degree of truth of their utterance (Ochs 1996: 410), could also be marked with [mi], especially when the children avoided ‘full commitment to the truth of, or belief in, their proposition’ (Snell 2010: 643), as observed in the following extract from Snell (2008: 88):²

(1)

- | | | |
|---|--------|---|
| 1 | David: | My [ma] dad nearly shaved my [mi] hair..yesterday |
| 2 | Harry: | @ |
| 3 | David: | Well actually he never. |
| 4 | | ((background noise 1.6 seconds)) |
| 5 | David: | ((Half to himself. Not clear if he is addressing Harry or |
| 6 | | whether Harry is still listening)) I should’ve combed my |
| 7 | | [mi] hair this morning. |

David uses [mi] to mark epistemic stance in line 1 since he is not committed to the truth of his utterance, as confirmed by his admission in line 3 (Snell 2008: 89). The use of

² All transcript extracts have been reformatted according to the transcription conventions in the appendix. Unless already anonymised, names and other potential identifiers have been changed.

[mi] in line 7 appears to be an instance of the aforementioned ‘self-talk’ which ‘serves to temper the self-criticism with light-heartedness and a sense of disengagement from the surrounding talk’ (Snell 2008: 89).

The final variant, centralised [mə], ‘may be a reduced form of any or all of the three other variants’ but is undoubtedly the most reduced (Hollmann & Siewierska 2007: 408). Like [mai] and [ma], [mə] is common and unstigmatised in spontaneous speech (Wales 1996: 14). All 44 realisations of [mə] were before consonants, although only 80 of 654 *possible* environments for the variant were vocalic (Snell 2008: 65).

2.2. (In)alienability and iconicity

Along with other possessive forms, *my* is often considered with respect to (in)alienability and iconicity. Inalienable possession is a semantic relation associated with ‘those entities which are obligatorily possessed, such as one’s hands or one’s daughter’ whereas alienable possession refers to items that are not possessed in this enforced way (Croft 2001: 360). Several (in)alienability hierarchies have been proposed, such as the following from Nichols (1988: 572), where the leftmost noun types are the most inalienable:

- (2) body parts and/or kinship terms > part-whole relations > spatial relations > culturally-based possessed items > other

Languages differ in their classification of nouns, sometimes including other noun types at the top of the hierarchy, but body part/kinship terms are characteristic of inalienability (Velázquez-Castillo 1996: 38). In fact, it is thought that these two noun types are always ranked as the most inalienable (Siewierska 2004: 144), which indeed is consistent across a range of publications (Haiman 1985: 130, Thompson 1995: 651, Velázquez-Castillo 1996: 135, Heine 1997: 85, Ball 2011: 311).

The distinction between inalienable and alienable nouns is sometimes expressed linguistically, where the alienable meaning tends to be marked with inflection (Bauer 2000: 155–6), as in Diegueño (Langdon 1970: 143, 145):

- (3) a. ?-ətal^y
1SG mother
‘my mother’

b. ?-ən^y-əwa:
1SG house
‘my house’

The alienable construction in (3b) has the same affixation as (3a) but with an additional *-n^y-* (Nichols 1992: 117). Such differences in the marking of (in)alienability are often explained with appeal to iconicity, the notion that ‘the structure of language reflects in some way the structure of experience’ (Croft 2003: 102). Within iconicity, it is proposed that conceptually closer meanings are denoted by linguistic forms that are more cohesive/proximate (Croft 2001: 360, Givón 2001: 35, Haspelmath 2005). This can be observed above where the closer relation between possessor and possessed in the inalienable expression (3a) has less marking material, thus less ‘linguistic distance’ (Haiman 1985: 130), than in alienable (3b).

Iconicity certainly accounts for (3) but the theory unfortunately makes some incorrect predictions, including the assumption that the additional material in alienable expressions

should always appear between the possessive form and the head noun, as in (3b). However, as Haspelmath (2008: 18) points out, this is not obligatory cross-linguistically, as exemplified in Koyukon (Thompson 1995: 654, 667):

- (4) a. se-tlee'
1SG-head
'my head'
- b. se-tel-e'
1SG-socks-POSS
'my socks'

Such incorrect predictions prompt Haspelmath (2008) to refute iconicity as an explanation for the (in)alienability distinction (and other grammatical distinctions) and instead propose a frequency-based account with the premise that 'the shorter and more cohesive expression types occur significantly more frequently than the longer and less cohesive expression types' (Haspelmath 2008: 2). This is supported by the fact that possessive forms occur with inalienable nouns more frequently than alienable ones; Haspelmath (2008: 16) found that kinship and body part nouns occurred with a possessive 48% and 45% of the time respectively in the spoken component of the British National Corpus (BNC), compared to only 12% of the time for alienable nouns. The frequency account is more theoretically sound than iconicity as the former 'predicts that the coding of inalienable constructions should tend to be shorter, but it says nothing about the position of the extra coding element in alienable constructions' (Haspelmath 2008: 18).

Hollmann and Siewierska (2007: 413) investigate these effects in their Lancashire corpus, finding that body part and kinship terms are indeed the most likely noun types to occur with a reduced variant of *my* (72.5% and 71.6% of the time respectively). In contrast, 'other' nouns occurred with reduced *my* in only 43% of cases. Furthermore, each individual speaker in the corpus adhered to the (in)alienability hierarchy, as those who produced reduced variants of the possessive singular with 'other' nouns also produced them with kinship and/or body part terms (Hollmann & Siewierska 2007: 414). Incidentally, the use of a reduced variant with *either* body part *or* kinship nouns and not the other does not violate the alienability hierarchy since both noun types are equally placed at the top of the hierarchy (Hollmann & Siewierska 2007: 414).

In the second part of their study, Hollmann and Siewierska (2007: 415) observe that *my*+noun constructions with kinship terms have the highest token frequency in the spoken part of the BNC (average 106.7) followed by those with body part terms (60) and finally the 'other' nouns (32.8). This is therefore consistent with the contention that high frequency words are more likely to be reduced (Zipf 1935, Bybee & Hopper 2001: 10–2). However, in a few cases, infrequent kinship terms are still reduced often, e.g. *niece* occurs with *my* only eight times in the BNC but the variant is reduced in each of its three occurrences with *niece* in the Lancashire corpus (Hollmann & Siewierska 2007: 417). Hollmann and Siewierska (2007: 417) appeal to relative frequency to account for such anomalies – out of all of the instances of *niece* in the BNC, the word occurs with the possessive singular a relatively high percentage of the time (16%), which could explain the high rate of *my* reduction with this noun.

These observations are particularly interesting given that 'English has never been characterized as a language where (in)alienability plays a structural role' (Hollmann & Siewierska 2007: 408). Hollmann and Siewierska (2007) suggest an explanation for these findings using the construction grammar framework, which is based on the idea that language consists of form-meaning associations that are not specific to one aspect of the grammar

(Fried & Östman 2004: 12). Hollmann and Siewierska (2007: 419–20) therefore propose that speakers may construct general schemas such as [*my* KIN] and [*my* BODY PART] that include within them the knowledge that these nouns tend to occur with a reduced variant of *my*, which can again help to explain cases like *niece*. However, the authors acknowledge that it is not clear how high a frequency (whether token frequency or type frequency) is sufficient for a schema to be constructed and used (Hollmann & Siewierska 2007: 420–1).

3. Methodology

This section presents details of my data collection and methods of analysis.

3.1. NECTE2 data

NECTE2 is a monitor corpus that forms part of the Diachronic Electronic Corpus of English (DECTE). The NECTE2 component contains interviews (approximately one hour in length) that were conducted with residents of the North East of England from 2007 onwards. Each interview features two interviewees, who often know each other personally, to help reduce the effect of the Observer's Paradox (Labov 1972: 209). The interviews were transcribed by different individuals but all followed a standard transcription protocol (a small extract of which is in the appendix) for uniformity.

3.1.1. Speakers

For my study, 24 speakers were selected from NECTE2 according to a balanced sample that was stratified by gender, age (younger vs. older) and social class (working class vs. middle class), resulting in three speakers “per cell”. The younger speakers were aged 18–26 while the older speakers were 40–77, to allow for an ‘apparent time’ analysis (Labov 1966) of generational differences in language use. All speakers were White British and had been born and raised in Newcastle upon Tyne.³ In NECTE2, speakers have been categorised according to their locality and social class. The accuracy of these classifications was checked by reading the interviews to find mentions of a given speaker's hometown, education, occupation and parents' occupations.

3.1.2. Normalisation

For each of the 24 speakers, 20 tokens of *my* were extracted from the corpus, resulting in a dataset of 480 tokens overall. This restriction in the number of tokens was practical and ensured an equal inter-speaker distribution of tokens for the purposes of normalisation.

Another normalisation issue arises with respect to differences in the anatomy of the vocal tract between men and women which causes women to generally produce vowels with higher formant frequencies (Ladefoged 2001: 43, Flynn 2011: 1–2). A key goal of phonetic research has therefore been to establish effective normalisation techniques that increase the comparability of measurements between speakers whilst maintaining significant linguistic and social trends in data (Disner 1980: 253, Flynn 2011: 2). Indeed, there has been extensive discussion of the advantages and disadvantages of different normalisation techniques (Disner 1980, Watt & Fabricius 2003, Flynn 2011, van der Harst 2011). These methods can sometimes mask salient patterns in the data (Disner 1980: 257) so deciding whether to use a

³ One speaker was born in Corbridge in Northumberland but admits himself that he ‘didn't really live in Corbridge’ (09-10/N/HG/294, T_2091_10_23) and was in fact raised in the Jesmond area of Newcastle upon Tyne.

normalisation method and which (if any) to use depends on the research questions that a linguist aims to address (Fabricius et al. 2011). My study did not warrant the use of a statistical normalisation method, but used a speaker-by-speaker data collection technique to serve a similar purpose, as explained below.

The four vowel variants of the possessive singular ([ai], [a], [i] and [ə]) were determined in advance based on the literature (Wales 1996: 14, Hollmann & Siewierska 2007, Snell 2008, 2010) and listening to a ‘pilot’ interview. Ascertaining variants before commencing data collection is important as formant measurements alone cannot inform a linguist as to which vowel has been produced (Pearce 2011: 6). In the speech of every single speaker, an unambiguous instance of each of the four vowel variants was identified. For example, [ə] was collected from the start of the word *about*, as this is an unambiguous, well-known example of schwa (Lieberman & Blumstein 1988: 43, Roach 2000: 17). Each realisation was viewed on the spectrogram in Praat (Boersma & Weenink 2012) and the formants measured using the default formant-tracking settings. A stable part of the vowel was selected on the spectrogram to avoid interference from surrounding consonants (Ladefoged 2003: 104–5) and the reliability of the automatic formant-tracking was checked visually following the guideline that there should be one formant per 1,000Hz (Ladefoged 2003: 113). Within this selection on the spectrogram, an average frequency in Hertz was generated for the three formants (F1, F2 and F3) relevant to vowel identification (Docherty & Foulkes 1999: 52), which is more accurate than using a single measurement point (Ladefoged 2003: 117, Di Paolo et al. 2011: 90). This identification and measurement procedure was repeated for every speaker and every one of their four unambiguous vowel variants. These were the ‘guideline’ measurements that instances of *my* could be compared to, as discussed below.

3.1.3. Extraction and analysis of the possessive singular

Using the same technique described in section 3.1.2, the 480 tokens of *my* from NECTE2 were analysed in Praat (Boersma & Weenink 2012) and each token’s formant measurements were compared to those for that speaker’s unambiguous vowel realisations. Of course, two sets of formant measurements will not match identically, but it is fairly straightforward to distinguish the vowel realisations — especially the diphthong [mai] with its distinctive formant pattern, and [a] and [i] at the extremes of vowel height. Any ambiguities in classifying less distinguishable realisations were resolved by comparing tokens’ formant measurements to those in Peterson and Barney (1952: 182), who classify vowels according to their frequencies based on unanimous, correct judgements from native speakers.

My method of categorising vowel variants therefore combined a number of means: (i) auditory impressions, (ii) visual inspection of formants, (iii) measurement of formants using Praat (Boersma & Weenink 2012), and (iv) comparison with results in Peterson and Barney (1952: 183). Vowel identification was therefore not dependent on a single measurement, increasing reliability. Studies using only impressionistic auditory analysis have been criticised since the method has the ‘risks of human error and subjectivity’ (Foulkes et al. 2010: 730) and researchers’ intuitions can bias their vowel perceptions (Knowles 1978: 82, Docherty et al. 1997: 279, Eckert 2000: 86). Foulkes et al. (2010: 730) rightly point out that acoustic analysis runs into similar problems if the method is not implemented appropriately according to the nature of the research, but combining acoustic phonetic analysis with the other means described above helps to avoid such issues.

For comparative purposes, the 480 vowel tokens were coded according to the intralinguistic factors tested in Snell (2008, 2010). The social variables of gender, age and social class were also coded for, given their potential to correlate with particular patterns of phonetic variation (e.g. Trudgill 1974).

3.2. BNC data

To test Hollmann and Siewierska's (2007) findings regarding the reduction of the possessive singular with respect to the (in)alienability hierarchy and frequency in the BNC, I collected data from the spoken section of the Mark Davies version of the same corpus. The BNC inevitably has some biases, including the fact that the materials were collected in the 1990s rather than more recently, but it contains 10 million words of spontaneous and scripted speech from a wide range of sources.

Following Hollmann and Siewierska's (2007: 415) method, every *my*+noun construction that occurred in my NECTE2 data was extracted and searched for in the spoken component of the BNC. Secondly, every noun that occurred in these constructions was searched for in the corpus. Relative frequency was then calculated by dividing the frequency derived from the first search by that from the second. As this method is not appropriate for nouns that occurred less than 30 times in the BNC (Hollmann & Siewierska 2007: 417), these were excluded from my relative frequency analysis. As presented in Hollmann and Siewierska (2007: 415–7), certain search procedures were followed to improve the reliability of results. Firstly, a 'noun' part-of-speech tag was used to exclude irrelevant forms, otherwise in calculating a relative frequency, the denominator (the number of tokens of a particular noun) would be erroneously large. Secondly, singular and plural forms of a given noun were included in the overall frequency total only if both forms occurred in my NECTE2 data. If either the singular or plural form featured in my data, that specific form would be searched for in the BNC. Thirdly, alternative spellings, spacing and hyphenation of nouns (e.g. *step-father*, *stepfather*, *step father*) were included in the BNC searches. Finally, constructions where the possessive singular and noun were not adjacent were excluded since in these cases the linguistic conditioning of the phonetic realisation is ambiguous (Hollmann & Siewierska 2007: 415).

Despite these efforts to replicate Hollmann and Siewierska's (2007) methods for purposes of comparability, my relative frequency percentages were almost always higher than theirs, which suggests that their BNC searches yielded a larger number of tokens for a given noun than mine did. This discrepancy may have arisen because the authors used the full version of the BNC with a particular interface whereas I used the free online version and, contrary to expectations, different BNC interfaces can generate different results (Willem Hollmann, personal communication, 16 April 2012). Nevertheless, the overall trends in my data were consistent with those in Hollmann and Siewierska (2007), as will be discussed in section 4.3.

4. Results

This section presents analysis of constraints on the phonetic variation in the use of the possessive singular in Tyneside English.

4.1. Social factors

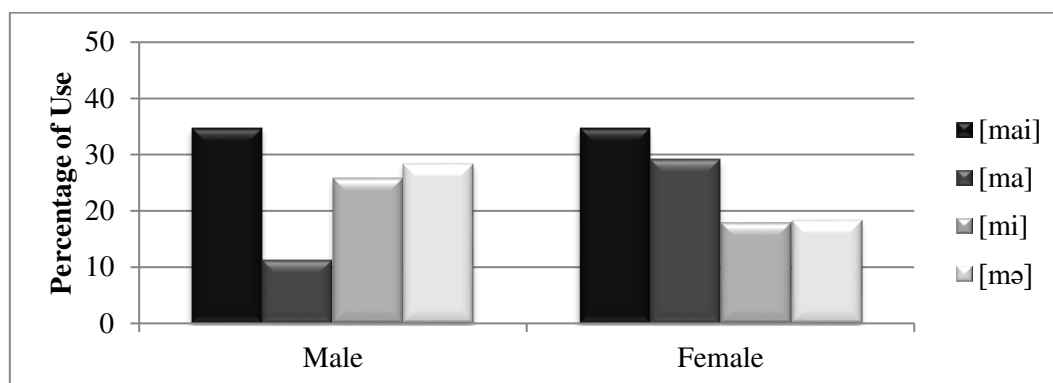
My analysis will begin with a discussion of how social factors (gender, age and social class) correlate with the realisation of *my* in NECTE2.

4.1.1. Gender

The distribution of realisations was statistically significant with respect to the gender of speakers. As Figure 1 shows, both groups use the standard variant [mai] exactly the same

percentage of the time (34.6%), contrary to well-known claims in the sociolinguistic literature that women tend to use standard forms more than men do (Trudgill 1974: 93, Gordon 1997, Chambers & Trudgill 1998: 61, Coupland 2007: 132). The male-female distinction in my data therefore lies not in the use of the standard variant but in the use of other, more reduced realisations.

Figure 1: Realisation of the possessive singular according to speakers' gender



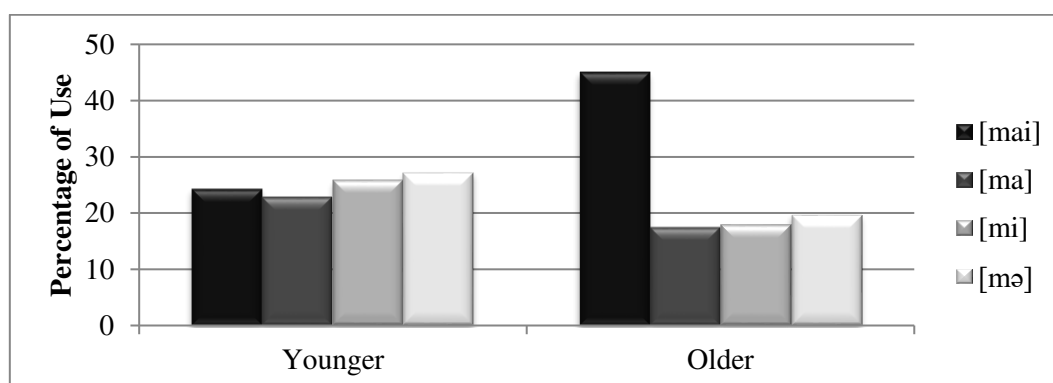
$$\chi^2 = 27.64; \text{d.f.} = 3; p < .001$$

The women's second most used variant is [ma], which appears 29.2% of the time, much more so than [mə] (18.3%) and [mi] (17.9%). The men's speech meanwhile exhibits great use of these latter two forms (28.3% for [mə] and 25.8% for [mi]). Male speakers also highly disfavour the [ma] realisation that is so common in female speech, using it in only 11.3% of cases. It therefore appears that the variants which are highly favoured by one gender are disfavoured by the other. The reason that men avoid [ma] is likely to be precisely because of its use by and association with female speakers. While this avoidance is largely unconscious (Eckert 2000: 216, Labov 2006: 6), it nevertheless seems to reflect the more conscious differentiation of the two groups in other aspects of life within society (Eckert 1989: 5). A similar explanation could be posited for the two genders' differentiated use of [mi] and [mə], but the distinction is not as substantial for these variants as for [ma].

4.1.2. Age

The age of speakers was also significant and the distribution of variants of *my* in this regard is shown in Figure 2.

Figure 2: Realisation of the possessive singular according to speakers' age



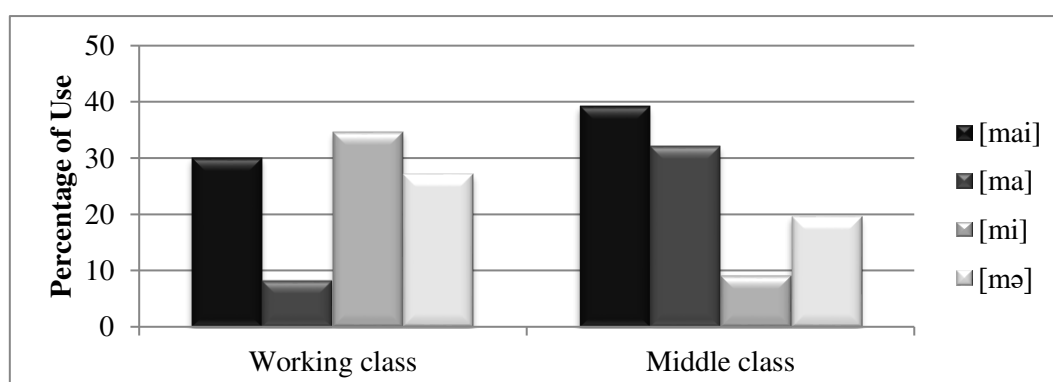
$$\chi^2 = 23.13; \text{d.f.} = 3; p < .001$$

The younger speakers' realisations are fairly evenly distributed, with only 10 tokens separating the most frequent variant [mə] (65 tokens out of 240) and the least used variant [ma] (55 tokens). The older speakers reduce *my* the majority of time but the standard variant [mai] is their single most frequent realisation, used at a high rate of 45%. The fact that the older generation use [mai] to the greatest extent and exhibit lower rates of use of the reduced variants compared to the younger group appears to support claims that older speakers are more likely to adhere to the standard (Llamas 2007: 71–2). This is thought to be primarily due to their greater engagement in the linguistic marketplace (Sankoff & Laberge 1978, Eckert 2000: 164), but this cannot always be the case as there were some retired individuals in my sample.

4.1.3. Social class

The most significant social factor with respect to realisations of the possessive singular was social class. The possessive singular was realised as [mai] a relatively high proportion of the time by speakers from both social classes but was the most common variant only in middle class speech, at 39.2%. The middle class speakers also used [ma] to a large extent (32.1%) which, along with its rarity in the working class data (8.3%), suggests that it is a middle class feature.

Figure 3: Realisation of the possessive singular according to speakers' social class



$$\chi^2 = 74.74; \text{d.f.} = 3; p < .001$$

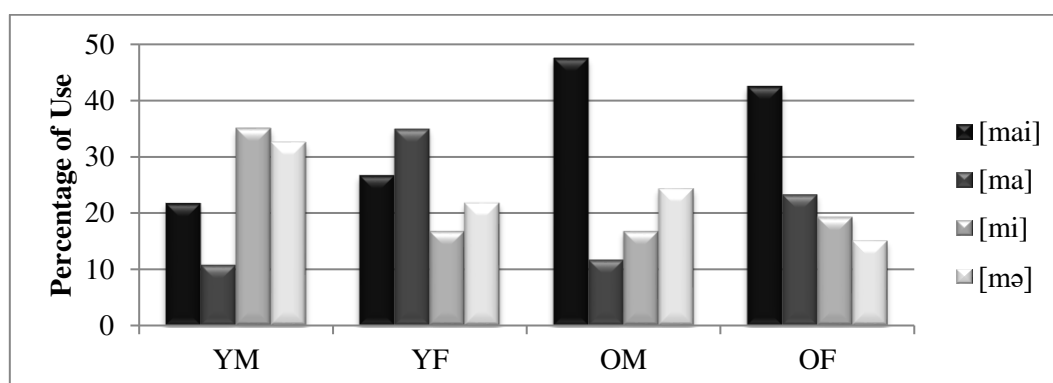
Indeed, it may be that the working class speakers avoid using [ma] because it is associated with the class that they feel distinct from socially (Milroy & Gordon 2003: 98). The societal differentiation of these classes appears to have given rise to these separate linguistic tendencies, which consequently reiterate the social distinction further and ‘then leads to a desire on the part of others not to be associated with the group so easily recognisable in its speech’ (Hickey 2000: 304). As such, the working class speakers instead use another variant, [mi], to such an extent that it is their preferred form. Although [mi] is stigmatised (Wales 1996: 14), it is prevalent in working class speech since their everyday conversation is ‘orthogonal to global prestige and stigma’ (Eckert 2000: 226). Working speakers have been found to use non-standard, stigmatised variants more than middle class speakers (Labov 1966, Trudgill 1974, Mees 1990: 179) and indeed the middle class individuals in my data avoid using [mi] (average 9.2%). This class distinction with respect to [mi] is consistent with Snell’s (2008: 63) finding that the children at Ironstone Primary, the working class school, used this form ten times more often than the children at middle class Murrayfield. Further evidence that working class speakers of Tyneside English use non-standard forms the most is provided by their greater use of [mə] (27.1%) compared to the middle class group (19.6%).

The results for gender in Figure 1 and social class in Figure 3 appear rather similar, so it is worth investigating whether there could be an interaction between the two variables (Sigley 2003). Therefore, cross-comparisons of (i) age and gender, (ii) age and social class and (iii) gender and social class will be presented in the following sections to illustrate further correlations.

4.1.4. Age and gender

The distribution of variants according to age and gender was highly significant. The finding discussed in section 4.1.2, that [mai] is used to a much greater extent by older speakers compared to the younger generation, is illuminated further in Figure 4 where it is evident that it is older men who use this form the most. This gender distinction within the older cohort is not mirrored in the younger group, in which it is the female speakers who use [mai] the most. Figure 4 also provides support for the contention in section 4.1.1 that [ma] is predominantly a female feature, as women from both age groups use the form a fairly substantial percentage of the time (35% for younger women and 23.3% for older women). In contrast, both generations of men disfavour [ma] to the extent that it is their least frequent realisation.

Figure 4: Realisation of the possessive singular according to speakers' age and gender⁴



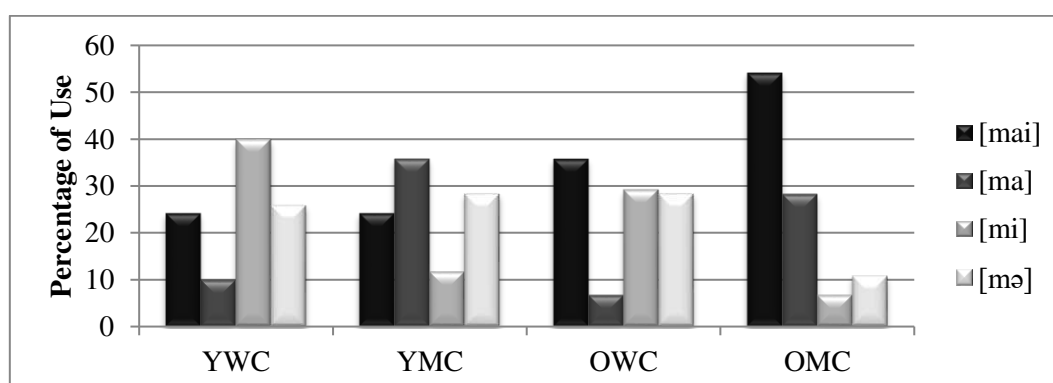
$$\chi^2 = 59.95; \text{d.f.} = 9; p < .001$$

As for [mi], the suggestion from section 4.1.1 that the variant is characteristic of male speech is not so clearly supported in Figure 4. Young men certainly favour the variant and their frequency of use (35%) is much higher than for the other social groups. However, this trend is not maintained in the older men's speech, as the variant is only their third most frequent, appearing in only 16.7% of instances of the possessive singular. It is therefore the younger men's clear preference for [mi] that accounts for the large number of instances of this variant in male speech overall. The variant [mə], on the other hand, patterns consistently across both age and gender. It is used by men more than women in both generations, and to a greater extent by younger speakers than older speakers across both gender groups.

4.1.5. Age and social class

Age and social class are together highly significant with respect to the realisation of the possessive singular.

Figure 5: Realisation of the possessive singular according to speakers' age and social class⁵



$$\chi^2 = 106.66; \text{d.f.} = 9; p < .001$$

⁴ YM = younger males, YF = younger females, OM = older males, OF = older females.

⁵ YWC = younger working class, YMC = younger middle class, OWC = older working class, OMC = older middle class.

The most striking result in Figure 5 is that [mai] is by far the most frequent variant in older middle class speech, appearing in 54.2% of cases. It is similarly the preferred variant in older working class speech. However, comparing percentages across social groups shows that the standard variant is used much more by older middle class speakers than older working class speakers, a common sociolinguistic finding (Labov 1966, Trudgill 1974).

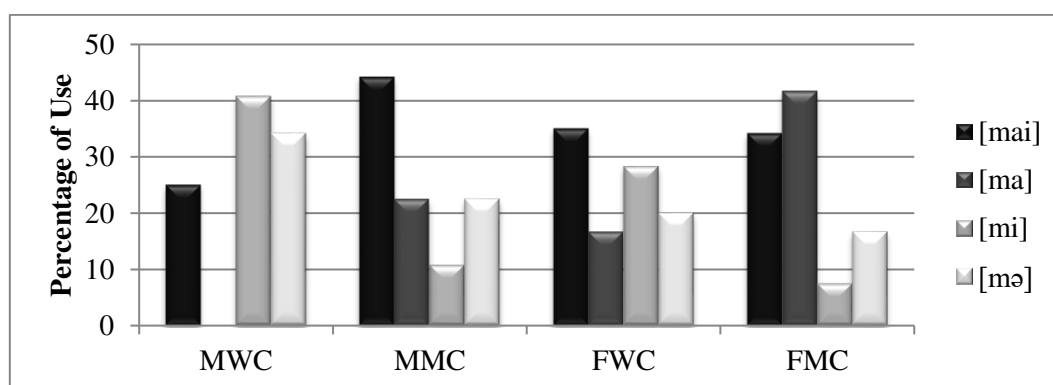
The [mə] variant also patterns according to class in the older generation but, as expected given that it is a reduced form, featured most in the speech of older working class people (28.3%) rather than the data from older middle class speakers (10.8%). This trend for [mə] is reversed in the younger cohort, although within this group there are only three more tokens present in middle class speech than in the working class data. Therefore, [mə] only seems to distinguish social class in the older generation.

In section 4.1.3, it was suggested that [ma] and [mi] are features of middle class and working class speech respectively. Figure 5 strongly supports this as this class trend is maintained consistently in both generations. However, as demonstrated in section 4.1.1, [ma] seems typical of female speech and [mi] features heavily in the men's vernacular. Section 4.1.6, which presents a combined analysis of gender and class, will therefore be particularly informative with respect to the patterning of these two variants.

4.1.6. Gender and social class

The final combined analysis, investigating gender and social class, was again highly significant. The previous observations that [ma] is a feature of both female and middle class speech, whereas [mi] is a male and working class form, are supported by the results in Figure 6.

Figure 6: Realisation of the possessive singular according to speakers' gender and social class⁶



$$\chi^2 = 107.99; \text{d.f.} = 9; p < .001$$

Firstly, [ma] is not used *at all* by the male working class speakers and is the least common realisation in female working class speech (16.7%). In contrast, middle class speakers use the variant much more, at rates of 22.5% amongst men and 41.7% by women, and it is actually the majority variant for the latter group. The hierarchy of social groups, with the leftmost using [ma] to the greatest extent, is FMC (41.7%) > MMC (22.5%) > FWC (16.7%) > MWC (0%), which illustrates an interaction between gender and class that is just as

⁶ MWC = male working class, MMC = male middle class, FWC = female working class, FMC = female middle class.

anticipated. The opposite hierarchy is found for [mi]: MWC (40.8%) > FWC (28.3%) > MMC (10.8%) > FMC (7.5%). Comparing these two hierarchies, it is apparent that [ma] marks a greater gender distinction amongst the middle class speakers than [mi] does within the working class group. The [ma] variant also patterns substantially differently across genders within the working class cohort but the same cannot be said for [mi] within the middle class group. Therefore, while [ma] is sharply stratified according to both gender and class, [mi] appears to correlate most significantly with class, exhibiting a smaller gender effect.

The realisation [mə] also distinguishes between genders and social class groups. The hierarchy of social groups according to the greatest use of this form is MWC (34.2%) > MMC (22.5%) > FWC (20%) > FMC (16.7%). The class differentiation in terms of [mə] use is greater in male speech than female speech, as in the latter there are only four more tokens in the working class data than in the middle class speech. The clearest distinction in use is actually between the male working classes and the other three groups. In contrast, the hierarchy of [mai] use is MMC (44.2%) > FWC (35%) > FMC (34.2%) > MWC (25%). The difference between the female working and middle class groups amounts to only one more token being present in the latter's data, so [mai] does not seem to be a class feature in women's speech. Curiously, the possessive singular is realised as [mai] more often than any other variant in female working class speech whereas it is only the second most common form in the female middle class data, even though this is the most standard variant and, as such, would be expected to occur at the highest frequency in middle class speech (Labov 1966, Trudgill 1974). However, this unusual tendency could reflect an attempt by the female working class speakers to emulate the speech of women who are of higher status and standing in society than themselves, in an instance of very slight hypercorrection (Milroy 1987: 97, Labov 2006: 152). Of course, one token does not constitute a significant difference, but it can still be said that the female working class group appear to emulate the female middle classes very well in their use of [mai]. However, the former do not adopt the latter's use of [ma], instead preferring [mi]. Meanwhile, working and middle class male speakers may wish to remain some distance from each other in terms of their linguistic choices, as reflected in their placement on the extreme ends of the social hierarchy with respect to their relative frequency of [mai] use.

4.2. Stylistic and interactional factors

Snell (2008, 2010) identified a number of stylistic factors that correlated with the use of particular possessive singular variants by Teesside primary school children. This section investigates the extent to which these factors, and other interactional constraints, apply to my Tyneside English data.

4.2.1. Stylised performance and stance

In my data, 18 out of 480 tokens of the possessive singular occurred in stylised performance, which is signalled via changes in the use of prosodic features and often followed by audience reaction such as comments or laughter (Rampton 2006: 262). While Snell (2008, 2010) found that only [mai] and [mi] featured in such contexts, no such tendency holds in my data. Across the 18 instances of stylised performance, in my data, Tyneside English speakers used the entire repertoire of possessive singular realisations (frequencies: [mi] – 7, [mai] – 5, [ma] – 3, [mə] – 3). There was also a large amount of intra-speaker variability – out of the five speakers who produced the possessive singular in stylised performance on more than one occasion, only one speaker used the same variant consistently. Therefore, although Snell's (2008, 2010) findings with respect to performance are presented

as rather ubiquitous, they are in fact highly context-dependent. Children's discourse, especially in classroom and playground settings where speakers are surrounded by their peers, lends itself to stylised performance which will inevitably have a different quality to that produced in an interview setting as in NECTE2, no matter how informal the environment and how well-acquainted the speakers may be. This contextual difference may also account for our differing results with respect to stance-marking; contrary to Snell's (2008: 91, 2010: 632) observations that the Teesside children used [mi] to mark a type of stance, stance-marking was not a statistically significant predictor of *my* realisation in my data ($\chi^2 = 3.69$; d.f. = 3; $p = .298$). Considering this in the light of the social tendencies discussed in section 4.1, it appears that variants of the possessive singular (at least [ma] and [mi]) are 'level 1' speech forms, which are used in 'identifying and recognizing members who occupy various roles' (Giles et al. 1979: 343), as opposed to 'level 2' forms which have additional stance-marking purposes (Giles et al. 1979: 343).

4.2.2. Stress

In my data, only [mai] and [ma] were stressed,⁷ reflecting Snell's (2008: 68) observations for Teesside. While there was only one token of stressed [ma], [mai] took stress 75.9% of the time, which occurred in particular contexts. The first of these contexts is *oh my God*,⁸ which featured stressed [mai] in each of the phrase's five instances. This phrase can be considered an interjection (Goffman 1978: 814), idiom (Dalton & Seidlhofer 1994: 45) or prefabricated phrase (Cheshire 2005: 88). Such constructions are 'stored and processed' as a whole (Cheshire 2007: 166) which helps to explain their set pronunciation. Interjections also express emotion (Aijmer 2009: 16), which also often correlates with stress placement (Kryk–Kastovsky 1997: 156).

The second environment in which stressed [mai] occurs is exemplified in (5):

(5)

- | | | |
|----|-------------------|--|
| 1 | [08-09/0/BM] | Right. Eh are all your family from the same area <xx> |
| 2 | | pretty much? Well, where are they from and like what- |
| 3 | | who's in your family and how many brothers you've |
| 4 | | got. |
| 5 | [08-09/N/PAL/286] | How do you mean? |
| 6 | [08-09/0/BM] | Well like your parents and your brothers and stuff. |
| 7 | [08-09/N/PAL/286] | Well my [mə] dad's not from round here he was the east |
| 8 | | end. Walker. Then they went to Newburn. |
| 9 | [08-09/N/TS/556] | <xx> |
| 10 | [08-09/N/PAL/286] | They lived behind the chip shop in Newburn. |
| 11 | [08-09/0/BM] | Which chippy? [08-09/0/BM] |
| 12 | [08-09/N/PAL/286] | On Franklin Road. [08-09/N/PAL/286] |
| 13 | [08-09/0/BM] | What? Go-Gordon's? [08-09/0/BM] |
| 14 | [08-09/N/PAL/286] | I've just told you that, aye! [08-09/N/PAL/286] |
| 15 | [08-09/0/BM] | Ah right. Ah yeah you did. Erm what about y-like your |
| 16 | | mam and your brothers and stuff? |
| 17 | [08-09/N/PAL/286] | My [mi] mam was from eh Burradon. Born in Burradon. |
| 18 | | Lived in Netherton and...then Morpeth {(0.6)} |

⁷ Stress can generally be defined as 'prominence' (Cruttenden 1997: 13), particularly with respect to 'pitch, loudness, duration and quality' (Laver 1994: 512).

⁸ Stressed [mai] was also used in *oh my goodness* but this phrase occurred only once in the data.

19 Northumberland aye.
 20 [08-09/N/TS/556] { Then
 21 married your dad.
 22 [08-09/0/BM] <xx>... Mam. [08-09/0/BM]
 23 [08-09/N/TS/556] My **[mai]** (**stressed**) mam was born in Newcastle. Yes
 24 so was my [mi] dad.

[T_2091_08_31]

From line 5, speaker 08-09/N/PAL/286 and the interviewer dominate the conversation – there are only minor contributions from 08-09/N/TS/556 and most are too quiet to be heard in the recording. The conversation about 08-09/N/PAL/286's father in lines 7–14 is followed up by interviewer in lines 15-16 with a question about other family members, to which 08-09/N/PAL/286 replies that his mother was from Burradon. This context helps to explain speaker 08-09/N/TS/556's use of stressed [mai] in her first substantial turn in line 23 even though it is her minority variant overall (only 4 occurrences out of 20). Specifically, the speaker seems to use stressed [mai] to emphasise a contrast – namely that her mother was born in Newcastle *as opposed to* 08-09/N/PAL/286's mother who was from Burradon. This relational function of stress is a recognised conversational device (Schegloff 1998: 252). Stress can also serve as an attention-seeking strategy (Laver 1994: 515), so 08-09/N/TS/556's use of stressed [mai] may also be an attempt to gain greater access to the conversational floor that was so dominated by 08-09/0/BM and 08-09/N/PAL/286 in lines 1–22.

These uses of stressed [mai] appear to arise due to the nature of the conversational setting. Speakers in NECTE2 are interviewed in dyads, so the interviewer's questions are usually directed at both interviewees. Stressed [mai] can therefore frame a speaker's response in the context of a previous speaker's turn(s). However, it is not the case that stressed [mai] is always used *after* another person's response to a question. In fact, the item that stressed [mai] relates to need not have been explicitly said (Schegloff 1998: 252):

(6)

1 [07-08/0/MA] Em could you please introduce yourself?...Both of you.
 2 [07-08/N/AM/222] OK, my **[mai]** (**stressed**) name's Arnold...and I was
 3 born in Newcastle in 1955, which makes me 52..um...

[T_8163_07_2]

The question in line 1 is from the onset of the recording and requires a response from both interviewees. In line 2, speaker 07-08/AM/222 stresses [mai] to express a contrast between his utterance and the *anticipated* response of the second interviewee, who he knows to have a different name, birthplace and/or birth year.

The next environment in which the possessive singular is frequently realised as stressed [mai] is before a pause. The [mai] variant is present in 13 out of 22 pre-pausal contexts and all except one of these realisations is stressed. 10 out of 12 of these stressed variants before a pause are also lengthened, as in (7):

(7)

1 [09-10/N/BS/152] Er..I gradually got interested in..community education..
 2 and did an adult em..adult ed certificate...and..em..

3 taught at the school my **[mai] (stressed and**
4 **lengthened)** (1) daughter then had just started which
5 was a community school. Em they offered..er..sociology
6 lo-lots of different adult education. But I taught
7 sociology there for a couple of years..and..I applied to
8 be em..a-an associate lecturer at the Open University
9 and got that job..and gradually just increased my **[mai]**
10 **(stressed and lengthened)** (1) {er..work there.
11 [09-10/0/AG] {Worked your way up.

[T_2091_10_24]

Speaker 09-10/N/BS/152's use of stressed, lengthened [mai] before a pause in lines 3 and 9 seems to be a way of indicating to her interlocutors that, despite her hesitation, she wishes to maintain her conversational turn. This arises due to the fact that 'speakers launch into the utterance of a phonemic clause while the planning for it is still incomplete' (Laver 1994: 538). Cruttenden (1997: 33) notes that lengthening can occur before a pause (i) due to a natural 'relaxation' process, (ii) to give the speaker time to ensure that 'the proceeding group has been articulated correctly' or (iii) to prepare for their next utterance. In (7), it certainly appears that lengthening [mai] helps to fill in hesitation time, a cue which is perceived by the interviewer 09-10/0/AG who in line 11 attempts to 'fill the gap', resulting in overlapping talk.

As for the two exceptions where stressed [mai] is not lengthened before a pause, in these cases other strategies are used which serve similar functions:

(8)

1 [07-08/N/AM/222] [...] I joined um a building company..a building and
2 Civil engineering company um with..a-a college course
3 built in to my **[mai] (stressed)** (.) **eh (lengthened)**
4 employment

[T_8163_07_2]

(9)

1 [07-08/N/AM/222] I have a..motorcycle..so when the weather is nice, I go
2 out on my **[mai] (stressed)** .. on my [ma] motorcycle.
[0.332 seconds] [0.194 seconds]

[T_8163_07_2]

In (8), maintaining the speaker's turn is achieved partly by stressing [mai] but mainly by using the filler *eh* (Schegloff 1982: 81, Fox 2010: 6) and lengthening it (Selting 2001: 243). Extract (9) meanwhile features no lengthening of any kind but stressed [mai] yet again helps to hold a turn. The utterance *on my motorcycle* is then repeated in a shorter space of time than the first instance, which was distinct enough to be perceived impressionistically then confirmed acoustically in Praat⁹ (Boersma & Weenink 2012). The second utterance is

⁹ The duration of each instance of *on my motorcycle* was averaged from three separate measurements.

approximately 42% shorter than the first, which is not merely due to the choice of a reduced variant in the second instance. It appears that because the speaker had paused with only some indication that he wished to maintain his turn (by stressing, but not lengthening, [mai]), he repeats his pre-pausal utterance more quickly than before to prevent another speaker gaining access to the conversational floor at that moment in time (Schegloff 1982, 1998: 241, Yaeger-Dror & Fagyal 2011: 123).

4.3. Intralinguistic factors

Unlike Snell's (2008, 2010) results for Teesside, phonetic environment was not a significant predictor of the realisation of *my* in Tyneside English ($\chi^2 = 1.51$; d.f. = 3; $p = .680$). However, the (in)alienability effects observed in NECTE2 were highly significant and corroborate those found in Lancashire by Hollmann and Siewierska (2007).

Table 1: Realisation of the possessive singular according to following noun type

	[mai]		[ma]		[mi]		[mə]		SUM
	N	%	N	%	N	%	N	%	
body part	6	13	14	30.4	11	23.9	15	32.6	46
kinship	51	26.8	43	22.6	49	25.8	47	24.7	190
other	92	46.7	34	17.3	31	15.7	40	20.3	197

$$\chi^2 = 28.87; \text{d.f.} = 6; p < .001$$

Body part nouns occur with a reduced variant of the possessive singular (either [ma], [mi] or [mə]) 87% of the time, most often with [mə]. Kinship terms somewhat unexpectedly occur with each variant in almost equal distribution and most often with [mai], but still occur with reduced *my* variants 73.2% of the time. Although the 'other' nouns occur with a reduced variant more than the full form, this amounts to only a small distinction of 105 vs. 92 tokens. It is unsurprising that 'other' nouns occur with some reduction as function words are often reduced in speech (Chun 2002: 187) and the significance of the result in Table 1 lies in the lower frequency of reduction with these noun types compared to the kinship and body part terms. This significance is emphasised when a chi-square is calculated for [mai] vs. all of the reduced forms ($\chi^2 = 27.31$; d.f. = 2; $p < .001$). This finding that inalienable nouns occur with reduced variants of the possessive singular the most complements Hollmann and Siewierska's (2007) results from Lancashire, suggesting that this is not a dialect-specific tendency but could actually prevail across many varieties of English.

The tendencies in Table 1 are further strengthened by the fact that in my data, every single speaker's reduction tendencies adhere to the (in)alienability hierarchy:

Table 2: Speakers' adherence to the (in)alienability hierarchy

Number of Speakers	Kinship	Body Part	Other
13	+	+	+
10	+	–	+
1	+	+	–

As in Hollmann and Siewierska's (2007: 414) corresponding table, the symbol + indicates that the speaker(s) used reduced variants of the possessive singular at least some of the time with a particular noun type. The symbol – meanwhile shows that the speaker(s) never used reduced variants with a certain type of noun, instead always using [mai]. As Table 2 shows, the 24 speakers of Tyneside English all adhered to the (in)alienability hierarchy as there were no speakers who sometimes produced reduced *my* variants with 'other' nouns and not with at least one of the other noun types. Hollmann and Siewierska's (2007: 414) table for their Lancashire data is almost exactly the same as mine. Although their corpus had 26 speakers, only 24 used reduced variants, whereas every single one of my 24 speakers reduced *my* to some extent. Both tables therefore feature 24 speakers and can be directly compared. While my data included 13 speakers who produced reduced variants with all three types of noun, the Lancashire corpus featured 12 such speakers (Hollmann & Siewierska 2007: 414). In both datasets there were 10 speakers who produced reduced *my* with kinship and 'other' nouns but not body part terms, which conforms to the overall trend since kinship and body part terms 'are not in any way ordered with respect to each other on the alienability hierarchy' (Hollmann & Siewierska 2007: 414). Furthermore, in both localities there was one speaker who produced reduced realisations with the noun types at the top of the (in)alienability hierarchy and not with 'other' nouns (Hollmann & Siewierska 2007: 414). The only other difference between our data is that Hollmann and Siewierska (2007: 414) additionally found one speaker who reduced *my* with kinship terms and 'other' nouns but not body parts. This remarkable consistency in the results for Lancashire and Tyneside English again suggests that the interaction between (in)alienability and reduction is a more general phenomenon at least in Northern English, if not more widely.

My final analysis concerns the frequency effect that Hollmann and Siewierska (2007) observed in relation to these reduction tendencies, using the method outlined in section 3.2. Out of all of the *my*+noun constructions that occurred in the NECTE2 sample, those featuring the most inalienable terms have the highest average frequencies in the BNC. The average token frequency for those constructions with kinship nouns was 114.8, which was much higher than the averages for the constructions with body parts (59.6) and 'other' nouns (56.3). The closeness in the average results for these latter two groups could indicate that, in Tyneside English, kinship nouns are more subject to frequency effects than body part terms. However, it may simply be due to a problem in the use of token frequency, which is apparent in another set of results, as explained below.

Hollmann and Siewierska (2007: 415) compare the token frequencies of *my*+noun constructions that include (i) 'other' nouns which occur at least twice in their data, categorically with reduced *my*, and (ii) 'other' nouns that occur at least twice but always with [mai]. The expectation that the former set of constructions would have a greater average frequency in the BNC was borne out as the average frequencies were 33.3 for the former and 20 for the latter (Hollmann & Siewierska 2007: 415). However, undertaking the same analysis for my data gives an entirely different result – 2.4 for the group of constructions that occur with some reduction compared to 172.5 for the group that does not. As the second set of data included the nouns *God*, *name* and *house*, all of which occur at high frequencies with the possessive singular in the spoken part of the BNC (with 575, 245 and 196 occurrences respectively), the data is extremely skewed. Token frequency is therefore an inappropriate measure, so I will now analyse the data using relative frequency.

The measure of relative frequency in this context is 'how often, out of all occurrences of the relevant nouns, they occur in the 1SG possessive construction' (Hollmann & Siewierska 2007: 417). The kinship nouns in my NECTE2 data occurred with the possessive singular the highest percentage of the time in the BNC (as the average frequency was 18%). Body part terms occurred with *my* at the next highest average rate of 10.6%, followed by

‘other’ nouns at 8.1%. Therefore, the inalienable nouns, which occurred with reduced *my* to a greater extent than the ‘other’ nouns in NECTE2, also occur in the BNC with higher relative frequencies. However, it should be noted that the small distinction between the average token frequency results which were previously observed for body part vs. ‘other’ nouns has not been increased by using relative frequency. While not explicitly presented in Hollmann and Siewierska (2007), the average relative frequencies for the Lancashire data (18.6% for kinship nouns, 7.9% for body part nouns and 4.6% for ‘other’ nouns) are actually fairly similar to mine. The specific frequency values vary between localities because the set of nouns in each dataset was not consistent and, as discussed in section 3.2, different versions of the BNC were used. However, this methodological difference does not appear to have been too problematic as the distinctions in frequencies between noun types are similar across both localities. Of course, these consistent results could still reflect biases in the BNC. Nevertheless, the greater frequency effects exhibited by kinship terms may indicate that these noun types are more characteristic of inalienability than body part terms, at least in the Lancashire and Tyneside dialects.

5. Conclusion

The research presented in this paper has demonstrated that variation in the phonetic realisation of the possessive singular *my* in Tyneside English is constrained on a number of intralinguistic and extralinguistic levels. Acoustic and qualitative analysis of *my* in NECTE2 interviews showed that the realisation of the possessive singular is context-dependent and its prosodic features serve a number of interrelated functions for turn organisation. Such everyday interactions are representative of the Tyneside English dialect, in which some variants of the possessive singular (particularly [ma] and [mi]) have developed a certain social salience with respect to age, gender and social class. These tendencies are overarched by the conditioning of the possessive singular under the (in)alienability hierarchy. Not only do kinship and body part nouns occur with reduced *my* variants more so than other nouns, but individual speakers appear to adhere to the hierarchy in their patterns of use. Reduction of *my* also correlates with the frequency of the nouns that the form collocates with. These (in)alienability effects supplement and support those from Lancashire (Hollmann & Siewierska 2007). Future research could further examine the extent to which these tendencies are pervasive across different regional varieties of English.

References

- Aijmer, K. (2009). Interjections in the COLT corpus. In Slembrouck, S., Taverniers, M. & van Herreweghe, M. (eds.), *From ‘will’ to ‘well’: Studies in linguistics offered to Anne-Marie Simon-Vandenberghe*, 11–19. Gent: Academia Press.
- Alexiadou, A. (2004). On the development of possessive determiners: Consequences for DP structure. In Fuss, E. & Trips, C. (eds.), *Diachronic clues to synchronic grammar*, 31–58. Amsterdam: John Benjamins.
- Anderwald, L. (2004). The varieties of English spoken in the southeast of England: Morphology and syntax. In Kortmann, B., Burridge, K., Mesthrie, R., Schneider, E. & Upton, C. (eds.), *A handbook of varieties of English, Volume 2: Morphology and syntax*, 175–195. Berlin: Mouton de Gruyter.
- Baker, P. (2012). *Introduction to Old English*. 3rd ed. Malden, MA: Wiley-Blackwell.
- Ball, C. (2011). Inalienability in social relations: Language, possession, and exchange in Amazonia. *Language in Society* 40, 307–341.

- Bauer, B. (2000). *Archaic syntax in Indo-European: The spread of transitivity in Latin and French*. Berlin: Mouton de Gruyter.
- Beal, J. C. (1993). The grammar of Tyneside and Northumbrian English. In Milroy, J. & Milroy, L. (eds.), *Real English: The grammar of English dialects in the British Isles*, 187–213. London: Longman.
- Beal, J. C. (2006). *Language and region*. London: Routledge.
- Berman, R. (2004). Introduction: Developing discourse stance in different text types and languages. *Journal of Pragmatics* 37, 105–124.
- Biber, D. & Finegan, E. (1989). Styles of stance in English: Lexical and grammatical marking of evidentiality and effect. *Text* 9, 93–124.
- Biber, D., Johannesssen, S., Leech, G., Conrad, S. & Finegan, E. (1999). *The Longman grammar of spoken and written English*. London: Longman.
- Boersma, P. & Weenink, D. (2012). *Praat: Doing phonetics by computer* (Computer program). Version 5.3.12, retrieved March 2012 from <<http://www.praat.org/>>.
- Bybee, J. & Hopper, P. (2001). Introduction to frequency and the emergence of linguistic structure. In Bybee, J. & Hopper, P. (eds.), *Frequency and the emergence of linguistic structure*, 1–24. Amsterdam: John Benjamins.
- Chambers, J. K. & Trudgill, P. (1998). *Dialectology*. 2nd ed. Cambridge: Cambridge University Press.
- Cheshire, J. (2005). Syntactic variation and spoken language. In Cornips, L. & Corrigan, K. P. (eds.), *Syntax and variation: Reconciling the biological and the social*, 81–106. Amsterdam: John Benjamins.
- Cheshire, J. (2007). Discourse variation, grammaticalisation and stuff like that. *Journal of Sociolinguistics* 11, 155–193.
- Chun, D. (2002). *Discourse intonation in L2: From theory and research to practice*. Amsterdam: John Benjamins.
- Clarke, S. (2004). The legacy of British and Irish English in Newfoundland. In Hickey, R. (ed.), 242–261.
- Corrigan, K. P. & Buchstaller, I. (2007). *Handbook to the Newcastle Electronic Corpus of Tyneside English 2 (NECTE2)*. Accessible at <research.ncl.ac.uk/necte2/documents/handbook.pdf> (accessed April 2012).
- Corrigan, K. P. & Buchstaller, I. (2007–2010). The Newcastle Electronic Corpus of Tyneside English 2 (NECTE2). <<http://research.ncl.ac.uk/necte2/index.htm>> (accessed March 2012).
- Corrigan, K. P., Buchstaller, I., Mearns, A. J. & Moisl, H. L. (2010–2012). A linguistic ‘time-capsule’ for the Google generation: The Diachronic Electronic Corpus of Tyneside English. <<http://research.ncl.ac.uk/decte>> (accessed March 2012).
- Coupland, N. (2001). Dialect stylization in radio talk. *Language in Society* 30, 345–375.
- Coupland, N. (2007). *Style: Language variation and identity*. Cambridge: Cambridge University Press.
- Croft, W. (2001). Typology. In Aronoff, M. & Rees-Miller, J. (eds.), *The handbook of linguistics*, 337–368. Malden, MA: Blackwell.
- Croft, W. (2003). *Typology and universals*. 2nd ed. Cambridge: Cambridge University Press.
- Cruttenden, A. (1997). *Intonation*. 2nd ed. Cambridge: Cambridge University Press.
- Dalton, C. & Seidlhofer, B. (1994). *Pronunciation*. Oxford: Oxford University Press.
- Davies, M. (2004). BYU-BNC. Based on the British National Corpus from Oxford University Press. <<http://corpus.byu.edu/bnc/>> (accessed April 2012).
- Di Paolo, M. & Yaeger-Dror, M. (eds.) (2011). *Sociophonetics: A student’s guide*. London: Routledge.

- Di Paolo, M., Yaeger-Dror, M. & Beckford Wassink, A. (2011). Analyzing vowels. In Di Paolo, M. & Yaeger-Dror, M. (eds.), 87–106.
- Disner, S. (1980). Evaluation of vowel normalization procedures. *Journal of the Acoustical Society of America* 67, 253–261.
- Docherty, G. & Foulkes, P. (1999). Derby and Newcastle: Instrumental phonetics and variationist studies. In Foulkes, P. & Docherty, G. (eds.), *Urban Voices: Accent Studies in the British Isles*, 47–71. London: Arnold.
- Docherty, G., Foulkes, P., Milroy, J., Milroy, L. & Walshaw, D. (1997). Descriptive adequacy in phonology: A variationist perspective. *Journal of Linguistics* 33, 275–310.
- Eckert, P. (1989). *Jocks and burnouts: Social categories and identity in the high school*. New York: Teachers College Press.
- Eckert, P. (2000). *Linguistic variation as social practice*. Oxford: Blackwell.
- Englebretson, R. (2007). Stancetaking in discourse: An introduction. In Englebretson, R. (ed.), *Stancetaking in discourse: Subjectivity, evaluation, interaction*, 1–25. Amsterdam: John Benjamins.
- Fabricius, A., Kendall, T. & Watt, D. (2011). Sociophonetics Workshop. Paper presented at the Methods in Sociophonetics Workshop, University of York, September 2011.
- Flynn, N. 2011. Comparing vowel formant normalisation procedures. *York Papers in Linguistics, Series 2* 11, 1–28.
- Foulkes, P., Scobbie, J. & Watt, D. (2010). Sociophonetics. In Hardcastle, W., Laver, J. & Gibbon, F. (eds.), *The handbook of phonetic sciences*, 2nd ed, 703–754. Oxford: Blackwell.
- Fox, B. (2010). Introduction. In Amiridze, N., Davis, B. & MacLagan, M. (eds.), *Fillers, pauses and placeholders*, 1–9. Amsterdam: John Benjamins.
- Fried, M. & Östman, J. (2004). Construction Grammar: A thumbnail sketch. In Fried, M. & Östman, J. (eds.), *Construction grammar in a cross-language perspective*, 11–86. Amsterdam: John Benjamins.
- Giles, H., Scherer, K. & Taylor, D. (1979). Speech markers in social interaction. In Scherer, K. & Giles, H. (eds.), *Social markers in speech*, 343–381. Cambridge: Cambridge University Press.
- Givón, T. (2001). *Syntax: An introduction, Volume 1*. Amsterdam: John Benjamins.
- Goffman, E. (1978). Response cries. *Language* 54, 787–815.
- Goffman, E. (1981). *Forms of talk*. Philadelphia: University of Pennsylvania Press.
- Gordon, E. (1997). Sex, speech and stereotypes: Why women use prestige forms more than men. *Language in Society* 26, 47–63.
- Haiman, J. (1985). *Natural syntax: Iconicity and erosion*. Cambridge: Cambridge University Press.
- Haspelmath, M. (2005). Iconicity versus frequency in explaining grammatical asymmetries. Paper presented at the University of Jena, April 2005. Handout available at: <<http://email.eva.mpg.de/~haspelmt/Jena05.pdf>> (last accessed January 2013).
- Haspelmath, M. (2008). Frequency vs. iconicity in explaining grammatical asymmetries. *Cognitive Linguistics* 19, 1–33.
- Heine, B. (1997). *Cognitive foundations of grammar*. Oxford: Oxford University Press.
- Hickey, R. (2000). Dissociation as a form of language change. *European journal of English studies* 4, 303–315.
- Hickey, R. (ed.) (2004). *Legacies of colonial English: Studies in transported dialects*. Cambridge: Cambridge University Press.
- Hickey, R. (2004). Appendix 1 - Checklist of nonstandard features. In Hickey, R. (ed.), 586–620.

- Hollmann, W. & Siewierska, A. (2007). A construction grammar account of possessive constructions in Lancashire dialect: Some advantages and disadvantages. *English Language and Linguistics* 11, 407–424.
- Hughes, A., Trudgill, P. & Watt, D. (2005). *English accents and dialects: An introduction to social and regional varieties of English in the British Isles*. 4th ed. London: Hodder Arnold.
- Knowles, G. (1978). The nature of phonological variables in Scouse. In Trudgill, P. (ed.), *Sociolinguistic patterns in British English*, 80–90. London: Arnold.
- Kryk-Kastovsky, B. (1997). Surprise, surprise: The iconicity-conventionality scale of emotions. In Niemeier, S. & Dirven, R. (eds.), *The language of emotions: Conceptualization, expression and theoretical foundation*, 155–169. Amsterdam: John Benjamins.
- Labov, W. (1966). *The social stratification of English in New York City*. Washington, D.C.: Center for Applied Linguistics.
- Labov, W. (1972). *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, W. (2006). *The social stratification of English in New York City*. 2nd ed. Cambridge: Cambridge University Press.
- Ladefoged, P. (2001). *Vowels and consonants: An introduction to the sounds of languages*. Oxford: Blackwell.
- Ladefoged, P. (2003). *Phonetic data analysis: An introduction to fieldwork and instrumental techniques*. Oxford: Blackwell.
- Langdon, M. (1970). *A grammar of Diegueño: The Mesa Grande dialect*. Berkeley: University of California Press.
- Laver, J. (1994). *Principles of phonetics*. Cambridge: Cambridge University Press.
- Lieberman, P. & Blumstein, S. (1988). *Speech physiology, speech perception, and acoustic phonetics*. Cambridge: Cambridge University Press.
- Llamas, C. (2007). Age. In Llamas, C., Mullany, L. & Stockwell, P. (eds.), *The Routledge companion to sociolinguistics*, 69–76. London: Routledge.
- Mees, I. (1990). Patterns of sociophonetic variation in the speech of Cardiff schoolchildren. In Coupland, N. (ed.), *English in Wales: Diversity, conflict, and change*, 167–194. Clevedon: Multilingual Matters.
- Milroy, L. (1987). *Observing and analysing natural language*. Oxford: Blackwell.
- Milroy, L. & Gordon, M. (2003). *Sociolinguistics: Method and interpretation*. Oxford: Blackwell.
- Nichols, J. (1988). On alienable and inalienable possession. In Shipley, W. (ed.), *In honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics*, 557–609. Berlin: Mouton de Gruyter.
- Nichols, J. (1992). *Linguistic diversity in space and time*. Chicago: University of Chicago Press.
- Ochs, E. (1996). Linguistic resources for socializing humanity. In Gumperz, J. & Levinson, S. (eds.), *Rethinking linguistic relativity*, 407–437. Cambridge: Cambridge University Press.
- Pearce, M. (2011). Methodology in field phonology. In Kula, N., Botma, B. & Nasukawa, N. (eds.), *The Continuum companion to phonology*, 3–15. London: Continuum.
- Peterson, G. & Barney, H. (1952). Control methods used in a study of the vowels. *Journal of the Acoustical Society of America* 24, 175–184.
- Quinn, H. (2009). Pronoun forms. In Peters, P., Collins, P. & Smith, A. (eds.), *Comparative studies in Australian and New Zealand English: Grammar and beyond*, 31–47. Amsterdam: John Benjamins.

- Quirk, R., Greenbaum, S., Leech, G. & Svartvik, J. (1985). *A comprehensive grammar of the English Language*. London: Longman.
- Rampton, B. (2006). *Language in late modernity: Interaction in an urban school*. Cambridge: Cambridge University Press.
- Roach, P. (2000). *English phonetics and phonology: A practical course*. 3rd ed. Cambridge: Cambridge University Press.
- Sankoff, D. & Laberge, S. (1978). The linguistic market and the statistical explanation of variability. In Sankoff, D. (ed.), *Linguistic variation: Models and methods*, 239–250. New York: Academic Press.
- Schegloff, E. (1982). Discourse as an interactional achievement: Some uses of ‘uh huh’ and other things that come between sentences. In Tannen, D. (ed.), *Georgetown University Roundtable on Languages and Linguistics 1981. Analysing discourse: Text and talk*, 71–93. Washington, D.C: Georgetown University Press.
- Schegloff, E. (1998). Reflections on studying prosody in talk-in-interaction. *Language and Speech* 41, 235–263.
- Selting, M. (2001). Fragments of units as deviant cases of unit-production in conversational talk. In Selting, M. & Couper-Kuhlen, E. (eds.), *Studies in interactional linguistics*, 229–258. Amsterdam: John Benjamins.
- Siewierska, A. (2004). *Person*. Cambridge: Cambridge University Press.
- Sigley, R. (2003). The importance of interaction effects. *Language Variation and Change* 15, 227–253.
- Snell, J. (2008). *Pronouns, dialect and discourse: A socio-pragmatic account of children’s language in Teesside*. Unpublished Ph.D thesis, University of Leeds.
- Snell, J. (2010). From sociolinguistic variation to socially strategic stylisation. *Journal of Sociolinguistics* 14, 630–656.
- Thompson, C. (1995). On the grammar of body parts in Koyukon Athabaskan. In Chappell, H. & McGregor, W. (eds.), *The grammar of inalienability: A typological perspective on the part-whole relation*, 651–676. Berlin: Mouton de Gruyter.
- Trudgill, P. (1974). *The social differentiation of English in Norwich*. Cambridge: Cambridge University Press.
- Trudgill, P. & Chambers, J. K. (1991). Pronouns and pronominal systems in English dialects. In Trudgill, P. & Chambers, J. K. (eds.), *Dialects of English: Studies in grammatical variation*, 7–10. London: Longman.
- van der Harst, S. (2011). *The vowel space paradox: A sociophonetic study on Dutch*. Utrecht: LOT.
- Velázquez-Castillo, M. (1996). *The grammar of possession: Inalienability, incorporation and possessor ascension in Guaraní*. Amsterdam: John Benjamins.
- Wales, K. (1996). *Personal pronouns in present-day English*. Cambridge: Cambridge University Press.
- Watt, D. & Fabricius, A. (2003). Evaluation of a technique for improving the mapping of multiple speakers’ vowel spaces in the F₁ ~ F₂ plane. *Leeds Working Papers in Linguistics and Phonetics* 9, 159–173.
- Yaeger-Dror, M. & Fagyal, Z. (2011). Analysing prosody: Best practices for the analysis of prosody. In Di Paolo & Yaeger-Dror (eds.), 119–130.
- Zipf, G. (1935). *The psycho-biology of language: An introduction to dynamic philology*. Boston: Houghton-Mifflin.

Appendix: Transcription Conventions

From Corrigan and Buchstaller's (2007) online *Handbook to the Newcastle Electronic Corpus of Tyneside English 2 (NECTE2)*:

{	Interruption/overlap
..	Short pause
...	Medium pause
(N)	Pause (N = number of seconds)
-	False start
@	Laughter
<xx>	Indecipherable passage
(())	Transcriber comments

Claire Childs
School of English Literature, Language and Linguistics
Percy Building
Newcastle University
Newcastle upon Tyne
NE1 7RU
United Kingdom

claire.childs@ncl.ac.uk